

PTO/SB/09 (2-04)

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Request for Continued Examination (RCE) Transmittal Address to: Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	09/956,954
	Filing Date	09/21/2001
	First Named Inventor	Etter
	Art Unit	2643
	Examiner Name	Alexander Jamal
	Attorney Docket Number	117.0003

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This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

- Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

 - ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

 - ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
 - ☒ Other Enter Amendment After Final filed May 3, 2005
 - ☒ Enclosed
 - ☒ Preliminary Amendment/Reply
 - ☐ Affidavit(s)/Declaration(s)
 - ☐ Information Disclosure Statement (IDS)
 - ☐ Other _____
- Miscellaneous**
 - ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
 - ☐ Other _____
- Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
 - ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 50-1058. I have enclosed a duplicate copy of this sheet.
 - ☒ RCE fee required under 37 CFR 1.17(e)
 - ☒ Extension of time fee (37 CFR 1.136 and 1.17)
 - ☐ Other _____
 - ☐ Check in the amount of \$ _____ enclosed
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED		
Signature	<i>Peter H. Priest</i>	Date
Name (Print/Type)	Peter H. Priest	Registration No.
		30210

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Etter
Serial No.: 09/956,954
Filed: September 21, 2001
For: NOISE COMPENSATION METHODS AND SYSTEMS FOR INCREASING
THE CLARITY OF VOICE COMMUNICATIONS
Group: 2643
Examiner: Alexander Jamal

Durham, North Carolina
July 1, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Preliminary Amendment

Sir:

Please amend the above identified application as follows:

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Reply to Office Action of March 21, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend claims 4, 5, 7, 9-11, 16, 21, and 22 and add new claims 23-30 as follows:

1. (canceled)
2. (previously presented): The system as in claim 21 further comprising:
a far-end noise level estimator which receives the far-end signal and generates a far-end noise level estimate based on the far-end signal; and
wherein the first noise adaptive compander further comprises an expander gain control unit for adaptively expanding the far-end signal, whereby the first noise adaptive compander further operates to adjust the amplification of low level far-end noise based on the far-end noise level estimate.
3. (previously presented): The system as in claim 21 wherein the first noise adaptive compander further operates to vary the far-end signal compression range based on a total gain derived from the near-end noise level estimate and a far-end speech level of the far-end signal.
4. (currently amended): The system as in claim 21 wherein the first noise adaptive compander further comprises:
a noise level threshold value; and wherein the a-noise adaptive gain controller (NGC) gain unit adapted to vary a far-end signal further operates to adjust the noise adaptive gain based on a ratio of the near-end noise level estimate and the noise level threshold value.

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5. (currently amended): The system as in claim 21 wherein the first noise adaptive compander further comprises:

a noise level threshold value; and wherein the a-noise adaptive gain controller (NGC) ~~gain unit adapted further operates to~~ vary a far-end signal gain based on a ratio of the near-end noise level estimate and the noise level threshold value, wherein the far-end signal gain is between a minimum gain and a maximum gain.

6. (previously presented): The system as in claim 21 further comprising:
a far-end noise level estimator receiving the far-end signal and generating a far-end noise level estimate based on the far-end signal; and

a second noise adaptive compander comprising:
a first input for receiving the near-end signal;
a second input for receiving the far-end noise level estimate;
a first output for providing a far-end output signal; and
a compressor gain control unit, wherein the second noise adaptive compander receives the near-end signal at the first input and receives the far-end noise level estimate at the second input, the compressor gain control unit adaptively adjusting a near-end signal compression range based on the far-end noise level estimate to adaptively compress the near-end signal to compensate for noise, whereby the second noise-adaptive compander operates to adjustably amplify the near-end signal based upon the far-end noise level estimate to produce the far-end output signal at the first output.

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7. (currently amended): The system as in claim 6 wherein the second noise adaptive compander further comprises an expander gain control unit for adaptively expanding the near-end signal, and further operates to adjust the amplification of low-levels of the near-end noise signal based on the near-end noise level estimate.

8. (previously presented): The system as in claim 6 wherein the second noise adaptive compander further operates to vary the near-end signal compression range based on a total gain derived from the far-end noise level estimate and a near-end speech level of the near-end signal.

9. (currently amended): The system as in claim 6 wherein the second noise adaptive compander further comprises:

a noise level threshold value; and

a noise adaptive gain controller (NGC) ~~gain-unit~~ adapted to vary a near-end signal gain based on a ratio of the far-end noise level estimate and the noise level threshold value.

10. (currently amended): The system as in claim 6 wherein the second noise adaptive compander further comprises:

a noise level threshold value; and

a noise adaptive gain controller (NGC) ~~gain-unit~~ adapted to vary a near-end signal gain based on a ratio of the far-end noise level estimate and the noise level threshold value, wherein the near-end signal gain is between a minimum gain and a maximum gain.

11. (currently amended): A method of compensating for noise comprising:

receiving a near-end noise level estimate of a near-end signal in a compander;